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ABSTRACT

Thirty Black and Anglo kindergarten children from lower and middle income neighborhoods were asked to respond to three different tasks in an effort to investigate seven phonological and syntactical features of Black English and to determine the utility of each elicitation procedure. The interviews consisted of three production tasks which required the child to give some information about a set of pictures; a sentence repetition task which contained the same linguistic constructions; and a storytelling task which elicited continuous, spontaneous speech. The findings were these: (1) three kinds of differences were found between nonstandard usage of Black and Anglo children; (2) forms of nonstandard usage differed in some instances; (3) Anglo children generalized the use of agreement; (4) only Black children used "have" and "do" with no agreement; (5) the rate of nonstandard usage differed between the two groups; (6) Black children more often used the nonstandard form of each construction; (7) nonstandard patterns of usage differed; (8) the implicational relationships among features for Black children did not appear to hold for Anglo children; (9) income level among Black children did not correlate with linguistic usage; and (10) the production tasks appeared to elicit the most fruitful corpus of data. (HS)

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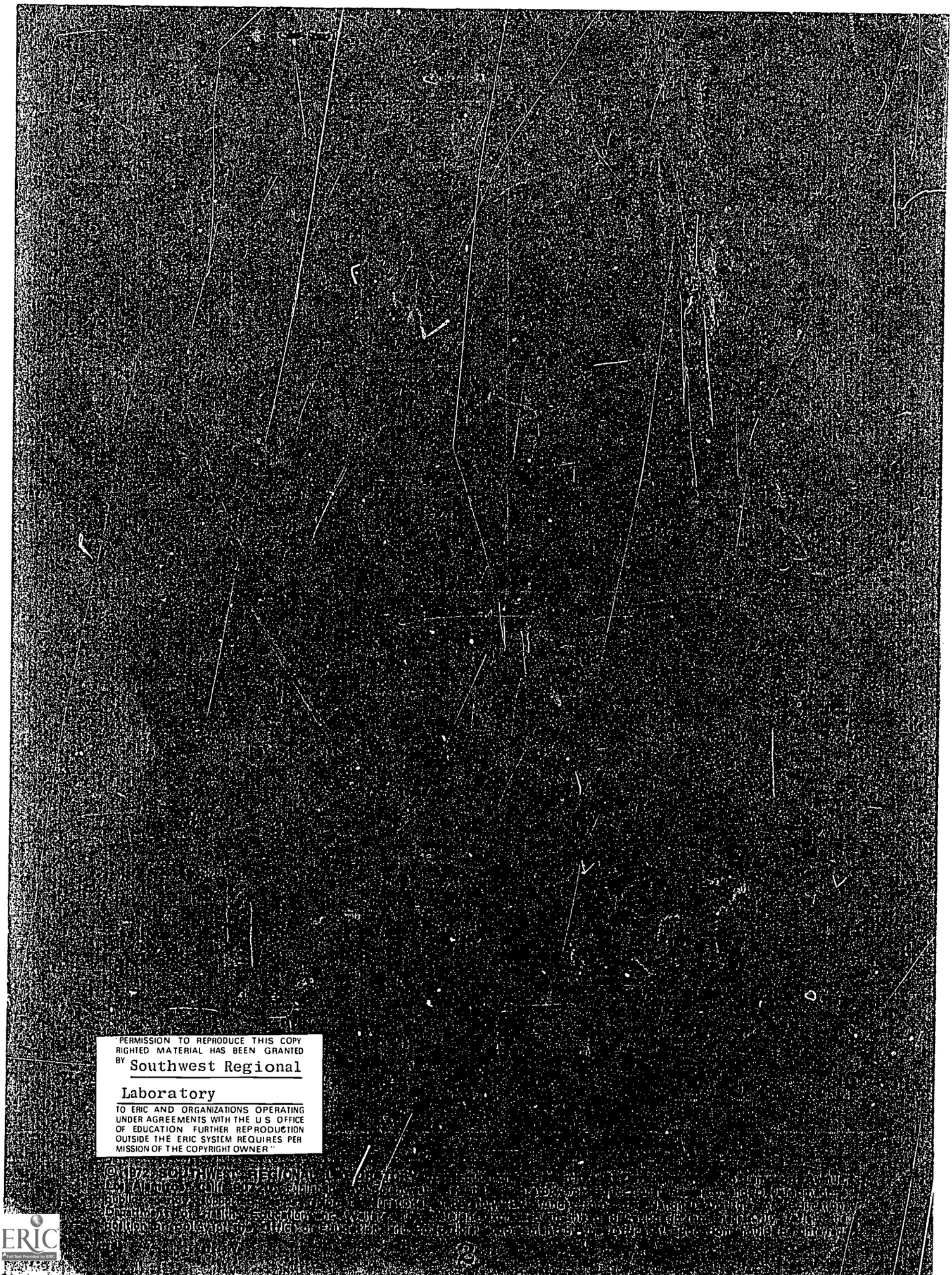
Sociolinguistic Variation in the Speech of Young Children: An Experimental Study



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SOCIOLINGUISTIC VARIATION IN THE SPEECH OF YOUNG CHILDREN: AN EXPERIMENTAL STUDY

Robert Berdan and Carol W. Pfaff

ABSTRACT

Thirty Anglo and Black kindergarten children responded to three types of elicitation procedures: production tasks, repetition tasks, and a storytelling task. Seven phonological and syntactic features known to be characteristic of Black English were investigated. In general, Black children responded with more nonstandard forms than did Anglo children. Within each group there was considerable variation in the proportion of nonstandard usage. Repetition tasks produced fewer nonstandard responses than did the production tasks. Responses to the production tasks were found to form an implicational scale with a high coefficient of reproducibility.

SOCIOLINGUISTIC VARIATION IN THE SPEECH OF YOUNG CHILDREN: AN EXPERIMENTAL STUDY*

Robert Berdan and Carol W. Pfaff

It is well known that many Black children in the United States speak a variety of English which differs from the English spoken by Anglo children. This English may be termed Nonstandard Black English (NBE). The linguistic characteristics of NBE have been described by Labov, Cohen, Robins, and Lewis (1968); Shuy, Wolfram and Riley (1967); Legum, Pfaff, Tinnie, and Nicholas (1971); and others. These studies identify phonological and syntactic features relevant for describing differences between NBE and Standard English. One of the most significant facts to emerge from these studies is that the realizations of these linguistic features in NBE are highly variable.

This variation has three distinct sources. There is interpersonal variation; not all members of a single social community show the same patterns of nonstandard usage. Secondly, there is stylistic variation; individuals exhibit different patterns of variation in different communication contexts. There is also inherent variation; variation within the speech of the individual which appears not to be associated with any style shift.

These sources of variation pose certain practical problems for the linguist. He must repeatedly observe the use of a particular construction before being confident that his data accurately reflect the full range of the informant's usage.

ELICITATION PROCEDURES

Previous sociolinguistic studies have employed several techniques for data elicitation. Spontaneous free conversation produces speech which is most likely to represent natural style since the informant's attention is focused on the content rather than the form of his speech. However, this technique has certain drawbacks. Even a large corpus of free conversation data often lacks sufficient instances of desired linguistic constructions, particularly syntactic ones, and of the necessary environments for interpreting their usage. A large free conversation corpus also has the disadvantage of being both time consuming and tedious to analyze.

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*Paper presented at the California Linguistics Conference, University of California, Santa Cruz, July 23, 1972.

One alternative procedure which avoids the difficulties of free conversation data is sentence repetition. In this technique, the investigator presents sentences to the informant and observes the manner in which they are repeated. The constructions used and the environments in which they occur are constrained by the stimulus sentences. However, sentence repetition tasks also have limitations. Only instances in which the informant does not succeed in repeating the stimulus can be used for making inferences about his natural speech. Exact repetition may indicate only that the informant is able to imitate the stimulus, without its being part of his productive grammar (Slobin, 1968).

Another type of elicitation procedure, production tasks, retains useful characteristics of both spontaneous conversation and repetition tasks while avoiding their most serious deficiencies. Tasks have been constructed which constrain the range of possible responses, but do not actually provide the informant a model to repeat. Control of the stimulus items in such production tasks virtually eliminates the incidence of noncomparable data from different informants, one of the major drawbacks of the free conversation technique. They can also be used to elicit multiple occurrences of a particular construction, important when variation itself is under investigation. Since no model is given for the response, production tasks also avoid the interpretation problems that inevitably arise in repetition tasks.

THE STUDY

For this study we used each of the elicitiation procedures discussed above. The purpose was to compare the utility of methods, as well as to examine the nature of Nonstandard Black English spoken by kindergarten children.

The interview included three production tasks, in which the child was required to give some information about a set of pictures; a sentence repetition task which contained the same linguistic constructions; and a story telling task.

The constructions of particular interest are listed in Table 1. The parenthetic notations under the "Nonstandard" column describe in general which informants used each nonstandard realization.

INFORMANTS

The informants were 30 kindergarten children: 10 Anglo and 10 Black children from a low income neighborhood and 10 Black children from a middle income neighborhood. There were equal numbers of males and females.

Table 1

Realizations of Linguistic Features in Production and Repetition Tasks

Construction	Realization	
	Standard	Nonstandard
Do as an auxiliary	does doesn't	do- (Black only) don't (Black and Anglo)
Have	has has got, -'s got	have (Black only) got (Black only) gots (Anglo only)
Initial voiced interdental fricative /ð/	fricative [ð]	Affricate [dð] Stop [d] (Black and Anglo)
Subject/verb agreement, present tense, third singular	[z], [s], [±z]	Ø (primarily Black some Anglo)
The copula is	is, -'s	Ø (Black only)
Noun Plural	[z], [s], [±z]	Ø (Neither Anglo nor Black)
Double Negative on Indefinite noun object	a, any	no (Both Black none and Anglo)

PRODUCTION TASKS

In Production Tasks I and II, the children were presented with 20 pictures of pairs of similar but not identical houses, birds, bugs, boats or clowns. The objects in each picture differed from one another in one of four ways: size, color, number of parts (e.g., the bug with three spots, and the bug with one spot, shown in Figure 1), or presence or absence of a part (e.g., bugs with and without hats).

Task I was used to familiarize the children with the materials and the kinds of responses they would later be asked to produce in response to Task II. They were presented with pictures such as that shown in Figure 1 and asked questions of the form:

(1) Tell me, which bug has three spots, this one or that one?

They were to answer by pointing to the correct figure and saying,

(2) a. This one.

b. That one.

The linguistic feature of interest was the pronunciation of the initial sound of <u>this</u> or <u>that</u> as:

(3) a. Interdental fricative [ð]

b. Affricate [dð]

c. Stop [d]

This task had some of the characteristics of a repetition task in that the standard pronunciation [ð] was presented as part of the interviewer's question. However, the child's focus of attention was on the content of the question--making and reporting the required distinction--rather than on repeating the model.

We found that Anglo children, and both middle and lower income Black children, used both standard and nonstandard pronunciations. In each group, at least one child used all standard forms, some used all nonstandard forms, and some used both. In general, more Black children used a high proportion of nonstandard stop and affricate pronunciations.

Task II was a production task designed to elicit <u>is</u>, <u>have</u>, and <u>do</u>. The same pictures used in Task I were used in Task II, but this time the children were asked to explain the difference between the pairs of objects in each picture. The interviewer asked,

(4) What's the difference between this bug and that bug?

An appropriate standard English response for the item pictured in Figure 1 is:

(5) This bug has three spots and this bug has one spot.

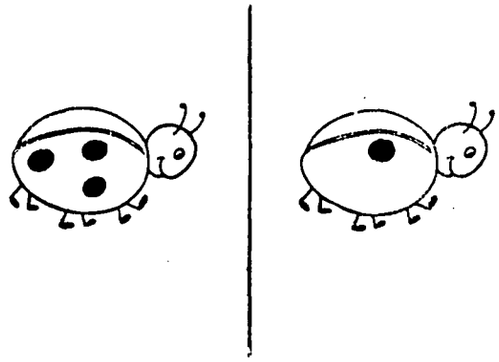

Fig. 1. Sample picture for Task I and II

Responses to distinctions of size and color almost always were copular sentences. The responses were of the forms:

(6) a. STD This house is big and that one is little.

b. NST This house big and that one little.

(7) a. STD This boat is blue and that one is red.

b. NST This boat blue and that one red.

Standard English gapping allows the copula to be deleted only in the second of two conjoined sentences.

(8) STD This house is big and this one little.

Anglo children generally responded with the copula is in both the first and second sentences. The only Anglo child who omitted the copula did so only in the gapping environment. Black children omitted the copula from either the first, the last, or both sentences.

When the objects in each picture differed in characteristics of parts rather than of the whole, responses contained a main verb indicating possession rather than the copula. Several verbs can be used to express possession in English. The standard and nonstandard responses elicited in the present study are shown in Table 1. Have is used for has only by Black children.

(9) a. STD This house has two windows and this house has one.

b. NST This house have two windows and this house have one.

Got with no auxiliary was another realization used only by Black children.

(10) a. NST This house got two windows and this one got one.

In a few instances the nonstandard realization gots, with an agreement morpheme, was used.

b. NST This house gots two windows and this house gots one.

When the distinction is the presence or absence of a part (11a,b), negation and the do auxiliary are also elicited. The order in which the pictures are presented determines in large part the order in which they are described. If the picture with the part is described before the picture without the part, responses take the form:

(11) a. STD This house has a window and this one doesn't.

b. NST This house have a window and this one don't.

Describing the picture without the part before the picture with the part elicits the responses:

(12) a. STD This house doesn't have a window and this one does.

b. NST This house don't $\left\{\begin{matrix}\text{have}\\\text{got}\end{matrix}\right\}$ no window and this one do.

These simple changes allow examination of both affirmative and negative. Don't was used by both Anglo and Black children. Nonstandard do, with no agreement marker, was used only by Black children. Both Anglo and Black children used multiple negation in some instances.

Task III was devised to elicit main verb agreement and plurals, using pictures like that in Figure 2. In this task the child was given an agentive noun compound and asked what the person does. For instance:

(13) This is a dog catcher. What does he do?

The appropriate standard answer is:

(14) STD He catches dogs.

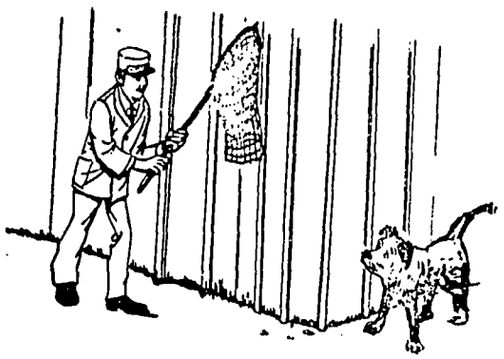

Fig. 2. Sample picture for Task III

Two items were enough to teach the children this paradigm of response. Compounds that could be expanded by singular nouns were avoided.

(15) a. This is a baseball player. What does he do?

b. He plays baseball.

Nouns beginning with sibilants that would obscure the presence or absence of agreement morphemes were also avoided.

(16) a. This is a sail maker. What does he do?

b. He makes sails.

Although regular English plural and agreement morphemes have essentially the same phonological shape, their use by Anglo and Black children is quite different. Anglo children seldom, and with no apparent pattern, delete either. Black children delete the agreement marker far more often than the plural marker.

In earlier testing, responses without a subject pronoun were accepted.

(17) Catch dogs.

Interviews with Black children showed that presence or absence of the subject pronoun did not condition the rate of deletion of the agreement morpheme. However, interviews with Anglo children revealed that those children who did not use subject pronouns deleted the agreement morpheme; those children who used the subject pronoun only rarely deleted the

agreement morpheme. It may be, for some children at least, that (17) is not the nonstandard equivalent of (14), but rather the standard equivalent of (18) or some other paraphrase in which the verb need not be marked for agreement.

(18) STD What he does is catch dogs.

It was found that children could be prompted to include the subject pronoun by being asked to "say the whole thing." Almost invariably the response would be repeated, but with a subject pronoun. For Black children there was no effect on the use of the agreement marker. However, Anglo children used the agreement marker much more frequently when the subject pronoun was also used.

Mean nonstandard response levels for each construction for each group are shown in Table 2. Anglo children used fewer nonstandard forms of each construction than did either middle or lower income Black children. This was as expected. There were, however, no significant differences between the rates of nonstandard responses for middle and lower income Black children. This was not what had been anticipated.

Table 2

Mean Nonstandard
Responses to Production Tasks

	Middle Income Black	Lower Income Black	Lower Income Anglo
agreement	.70	.69	.13
have	.72	.66	.13
do	.71	.67	.16
ð	.58	.32	.18
be	.18	.15	.01
plural	.09	.10	.01
double negation	.41	.50	.11
Mean	.48	.44	.09

Analysis of the responses of individual children, however, shows a wide range of variation within each group. No individuals responded with exclusively nonstandard realizations on all constructions.

In both Black groups there were individuals who used some nonstandard responses for all of the constructions. In the Anglo group, each construction had some nonstandard responses, though no child gave nonstandard responses for all of the constructions. Some Black children used fewer nonstandard forms than did some Anglo children.

These observations lead to the type of analysis suggested by DeCamp (1969) in which primary consideration is given to linguistic variables rather than to less precise social groupings.

Certain generalizations can then be made about the nonstandard responses of individual children to individual constructions. First, it was possible to determine which features show variation between children and which show variation within the speech of a single individual. For have and do, some children consistently used standard forms; some consistently used nonstandard forms. Few used both. The other features tend to be variable within individuals.

Second, nonstandard usage of all features was positively correlated. For instance, all the Black children who used nonstandard do also used nonstandard have, and vice versa. This is not surprising, given that nonstandard do and nonstandard have are in large part special instances of nonagreement. There were also correlations among features with no linguistic properties in common: Black children who had a high rate of nonstandard /ð/ generally also had a high rate of nonstandard do and have.

The relationships between the nonstandard usage of the features other than do and have were not symmetrical. While it was true that all Black children who used nonstandard do and have also used nonstandard main verb agreement, it was not the case that all those who used nonstandard main verb agreement also used nonstandard do and have.

A formalization of these implicational statements (Torgerson, 1967) is shown in Table 3. A "1" indicates that the child used the nonstandard form at least 50% of the time; "0" less than 50% of the time.

If the data scale perfectly, one can predict that if a child is rated "1" for a given feature, he will also be rated "1" for all features ranked higher in the scale. If he is rated "0" for a feature, he will be rated "0" for all features ranked lower in the scale. Ten anomolous positions occur in the scale, making the implications about 95% reproducible.

The scale shows quite clearly the difference between the responses of the Anglo and Black children. It also shows that for the Black

Table 3

Implicational Scale of Nonstandard Responses

Participant	Main Verb Agreement	do	have	/ð/	is	Plural
BM	1	1	1	1	1	0
BL	1	1	1	1	0	0
BL	1	1	1	1	0	0
BM	1	1	1	1	0	0
BM	1	1	1	1	0	0
BM	1	1	1	1	0	0
BL	1	1	1	1	0	0
BM	0*	1	1	1	0	0
AL	0*	1	0*	1	0	0
BL	1	1	1	0	0	1*
BL	1	1	1	0	0	0
BL	1	1	1	0	1*	0
BM	1	1	1	0	0	0
BM	1	1	1	0	0	0
BM	1	1	1	0	0	0
BM	1	0	0	0	0	0
BL	1	0	0	0	0	0
BM	0	0	0	1*	0	0
BM	0	0	1*	0	0	0
A/BL	0	0	1*	0	0	0
AL	0	0	1*	0	0	0
A1	0	1*	0	0	0	0
BL	0	0	0	0	0	0
BL	0	0	0	0	0	0
AL	0	0	0	0	0	0
AL	0	0	0	0	0	0
AL	0	0	0	0	0	0
AL	0	0	0	0	0	0
AL	0	0	0	0	0	0
AL	0	0	0	0	0	0

*Anomolous response

children, the descriptor of income level does not correlate with nonstandard usage of the linguistic constructions studied.

Although there were twice as many Black children as Anglo children in the sample, the Anglo children account for half of the anomolous positions on the scale. Because Anglo children generally gave a low rate of nonstandard responses, the cut off point of 50% obscures the pattern of their nonstandard responses. Actual numerical scores suggest that the implicational relationships that hold for the Black children do not hold for the Anglo children.

REPETITION TASKS

For the repetition tasks children were shown some of the same pictures used for Production Tasks II and III. As stimuli they were given standard responses to the items and asked to repeat them.

Comparison of repetition task responses (Table 4) with production task responses (Table 2) shows a positive correlation between the two methods. However, the rate of nonstandard responses was lower on the repetition

Table 4

Mean Nonstandard
Responses to Repetition Tasks

	Middle Income Black	Lower Income Black	Lower Income Anglo
agreement	.20	.25	.02
have	.67	.61	.11
do	.50	.28	.06
ð	.38	.59	.10
be	.12	.06	.00
plural	.03	.02	.00
double negation	.18	.28	.06
Mean	.27	.30	.05

tasks than on the production tasks. This was true almost without exception for all children on all tasks, and was to be expected, given that all the repetition stimulus sentences contained only standard realizations.

An apparent exception is the use of fricative /ð/ by lower income Black children. However, this is not a true comparison between production and repetition since even the production task provided the children with a model of the standard realization. It may also be that phonology is not affected by repetition in the same way as syntactic constructions.

Other instances in which a child did not give more standard responses to a repetition task than to the comparable production task were those in which he never used standard responses in the production task; instances in which there was no inherent variation.

As mentioned previously, data from repetition tasks are useful only when the informant alters the sentence in repetition. If variation in NBE were only interpersonal, repetition would be a valuable technique. If an informant hears a standard form and translates it into the equivalent nonstandard form, this would support the evidence from production data suggesting that the lack of standard forms in spontaneous speech was not fortuitous but outside the informant's repertoire. This seemed to be the case for many Black children who consistently used nonstandard have in the repetition task as well as in the production task.

The problem arises when there is variation in spontaneous production: the children who spontaneously use both standard and nonstandard agreement, for example. Some of these same children used only standard agreement in repetition.

It is difficult to demonstrate inherent variation using only repetition data. If a child spontaneously produces

(19) This one Ø big and that one is little.

it is evidence for variation. But if it is a repetition response to the standard stimulus

(20) This one is big and that one is little.

no such argument can be made, since only the nonconformity is relevant.

One could construct a repetition task using both standard and nonstandard stimulus sentences. If an informant produces standard responses to nonstandard stimuli and nonstandard response to standard stimuli, there would be evidence for variation. However the data suggest that, given the ability to repeat when both stimuli are in the

repertoire of the informant, much variation would be undetectable or would be distorted.

There are other ways in which the responses to the production tasks differ from the responses to the repetition tasks. For example, the syllabic allomorph [ɨz] of both the plural morpheme and the third person agreement morpheme (as in horses and catches) was never deleted in the repetition tasks. For the agreement morpheme these were the only instances in which this was true. Consideration of these repetition data alone could lead one to make statements such as, for the Anglo children, at least, acquisition and control of the syllabic allomorph is more complete than for the other allomorphs. For the Black children one might say that the syllabic allomorph is not involved in the same variation as the other allomorphs. The first of these statements is counter to the findings of other research dating back to Berko (1958), and both statements are in contradiction with the responses of these same children to the production tasks. In these, for both Anglo and Black children, the syllabic allomorph was deleted more frequently than were either of the other allomorphs.

STORYTELLING TASK

The final task performed by the children was telling the story of Goldilocks and the Three Bears. The object of this task was to elicit continuous, spontaneous speech. Large pictures which represented the story in sequence were displayed to provide non-verbal cues.

This story was chosen because most children know it and because it contains many repeated utterances, important when variation is being investigated. For instance, all of the following occurred in the speech of one child:

(21) a. Someone has been sitting in my chair.

b. Someone been sitting in my chair.

c. Someone was sitting in my chair.

The stories were analyzed for the same constructions elicited in the production tasks. However, do and have did not occur in the children's stories. Most children did use plurals, and /ð/.

The stories were also analyzed for occurrences of other nonstandard constructions. Some Black children used her in contexts where Standard English uses the nominative pronoun she.

(22) Her went upstairs.

There were instances of most of the other features that characterize NBE. However, only a few children created the context necessary for

occurrence of each nonstandard feature. Some children, for instance, told the story in the past tense, thus providing no potential for agreement. Because of the large number of missing data cells, it was not possible to expand the implicational scale to include these constructions.

One additional construction, the possessive, was used by most Anglo and Black children. There were several different realizations. Some children used standard possessives (23a), some omitted the possessive marker (23b), but often the marker was placed after the first noun in the phrase (23c). Some children used it in both positions (23d), and most children used at least two different kinds of possessives from the set (23 a-d).

(23) a. STD The father bear's bed was too hard.

b. NST Goldilocks tasted the poppa bear porridge.

c. NST The baby's bear porridge was just right.

d. NST Momma's bear's was too cold.

There was little correlation between nonstandard possessives and other nonstandard constructions. It is quite possible that this represents incomplete acquisition of possessive as well as dialect. There is no reason to believe that developmental factors should scale with dialect features.

Because there were not sufficient data to make a feature-by-feature comparison, we compared overall nonstandard usage in the stories with the results of the production and repetition tasks. A very high rank order correlation was found with the production data; less correlation with repetition data. This suggests that production tasks produce a closer correspondence to natural speech than do repetition tasks.

CONCLUSIONS

Three kinds of differences between the nonstandard usage of Anglo and Black kindergarten children were found. The forms of the nonstandard usage differed in some instances. Anglo children generalized the use of agreement and extended it to gots; only Black children used have and do with no agreement. The rate of nonstandard usage differed between the two groups. Black children used the nonstandard form of each construction more often than did Anglo children. Nonstandard patterns of usage differed; the implicational relationships among features which held for Black children do not appear to hold for Anglo children.

Income level among Black children did not correlate with linguistic usage. This was surprising given that previous research has shown such correlation among adults and older children. There are, however,

anecdotal indications of how these differences may develop. Middle income children showed a greater tendency to correct themselves; nonstandard forms were changed to standard forms. If the children continue this self-monitoring, the speech differences found between income groups could well appear among these same children when they are older.

A few of the Black children interviewed used nonstandard forms infrequently--less often in general than did some Anglo children. Two in particular used virtually no nonstandard forms in production or repetition tasks, and very few in the storytelling task. It seems inappropriate to use a single term "Nonstandard Black English" to describe both the speech of these two children and the speech of other Black children who frequently use nonstandard forms. Impressionistically, however, these Black children do not sound like the Anglo children. Another term, "Standard Black English", has been proposed by Taylor (1971) to describe such speech. Further study is needed to determine the objective linguistic correlates of this concept.

Of the three types of elicitation procedures employed, production tasks appear to elicit the most fruitful corpus of data. Tasks of this type can greatly facilitate the work of the sociolinguist, particularly when interviewing children. Results from all informants are comparable. Constructions occuring at low frequency in natural conversation may be efficiently elicited. Since the responses are spontaneous, not repetitions of the stimuli, they represent the productive capacity of the informant, not simply his ability to mimic.

REFERENCES

Berko, J., & Brown, R. Psycholinguistic research methods. In Mussen, P. H. (Ed.) Handbook of research methods in child development. John Wiley, New York, 1960.

DeCamp D. Implicational scales and sociolinguistic linearity. Paper given at LSA meeting, December, 1969.

Labov, W., Cohen, P., Robins, C., & Lewis, J. A study of the non-standard English of Negro and Puerto Rican speakers in New York City. Final Report, Cooperative Research Project 3288 2 Volumes, 1968, Washington, D. C.: Office of Education.

Legum, S., Pfaff, C., Tinnie, G., & Nicholas, M. The speech of young Black children in Los Angeles. Technical Report 33, September 1, 1971, Southwest Regional Laboratory, Los Alamitos, California.

Shuy, R., Wolfram, W. A., & Riley, W. K. Linguistic correlates of social structure in Detroit speech. Final report, Cooperative Research Project N. 6-1347, United States Office of Education, 1967.

Slobin, D. I. Imitation and grammatical development in children. In Endler, N., et al., (Eds.) Contemporary issues in developmental psychology. Holt, Rinehart & Winston, New York, 1968.

Taylor, O. Response to Williams, F. "Social dialects and the field of speech." In Shuy, R., (Ed.) Sociolinguistics: A cross-disciplinary perspective, Washington D. C.: Center for Applied Linguistics, 1971.

Torgerson, W. S. Theory and methods of scaling. John Wiley & Sons, New York, 1967.